

APPENDIX

The change(s) to the specification and/or claims are below shown by underscoring and bracketing.

In the Claims:

Claims 3, 5-7, 9-12, and 19 have been amended as follows:

3. (Amended) A component according to claim 1 [or 2], wherein the indicator material has an optical emission spectrum which varies in response to a physical parameter of the components.

5. (Amended) A component according to [any of claims 1 to 4] claim 1, wherein the refractory material is selected from the group consisting of yttria stabilised zirconia, yttria partially stabilised zirconia, and yttria aluminium garnet.

6. (Amended) A component according to [any of claims 1 to 5] claim 1, wherein the indicator material is a phosphor material.

7. (Amended) A component according to [any of claims 1 to 5] claim 1, wherein the indicator material comprises a rare earth dopant.

9. (Amended) A component according to [any of claims 1 to 8] claim 1, wherein the indicator material comprises a compositionally-graded structure, a composite structure, or a multi-phase structure.

10. (Amended) A component according to [any of claims 1 to 9] claim 1, wherein the thermal barrier coating comprises a layered structure of indicator materials having different respective emission spectra.

11. (Amended) A component according to [any of claims 1 to 10] claim 1, wherein the thermal barrier coating comprises a layered structure of an outermost, substantially transparent region and a region including an indicator material optically interrogatable through the substantially transparent region.

12. (Amended) A component according to [any of claims 1 to 11] claim 1, wherein the component is a component of a combustion engine.

19. (Amended) A machine according to claim 17 [or 18], wherein the machine is a combustion engine.

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